

## Rutherford County Natural Area Inventory

### SANDY MUSH OUTCROP Significant Natural Heritage Area

**Site Significance:** State  
**Quadrangle:** Forest City

**Size:** 181 acres  
**Ownership:** Private

**SIGNIFICANT FEATURES:** This site contains a large example of the rare Granitic Flatrock natural community. This site is reported to be the largest granitic flatrock in the state of North Carolina. It is also significant for supporting a number of rare plant species found only in association with granitic flatrocks. These include single-flower sandwort (*Minuartia uniflora*), Piedmont quillwort (*Isoetes piedmontana*), and elf orpine (*Diamorpha smallii*). Georgia oak (*Quercus georgiana*), a species not documented from North Carolina, was reported from this site in the mid 1980s, but several attempts to relocate it have failed.

**LANDSCAPE RELATIONSHIPS:** This site is located within the northern portion of the Broad River Valley Macrosite on a predominantly west-facing slope in south central Rutherford County. The surrounding landscape is highly fragmented rural residential development with some agriculture lands present as well. The landscape area surrounding this site is roughly 30-40% forested. Standard Sites located near this site include New Bethel Rare Plant Site located 1.3 miles to the southwest, and Hogpen Branch Flatrock 2.3 miles to the southeast.

**SITE DESCRIPTION:** This site consists of a granitic flatrock surrounded by maturing forest, and a narrow alluvial zone along a fork of Floyds Creek. The Granitic Flatrock is a mosaic of vegetation and bare rock covered with crustose lichens, moss and lichen mats, small herb mats on shallow soils, seeps, and shrub and tree islands on deeper soils. Herb mats are dominated by Willdenow's croton (*Croton wildenowii*), pineweed (*Hypericum gentianoides*), and broomsedge (*Andropogon virginicus*). In the herb mats are also fameflower (*Talinum teretifolium*), cactus (*Opuntia humifusa*), buttonweed (*Diodia teres*), broomsedge (*Andropogon ternarius*), poverty grass (*Danthonia spicata*), and little bluestem (*Schizachyrium scoparium*). Weedy species present includes triple awn grass (*Aristida dichotoma*), dog fennel (*Eupatorium capillifolium*), horseweed (*Conyza canadense*), and pilewort (*Erechtites hieracifolia*).

Extending eastward from the flatrock is a fair quality maturing Dry Mesic Oak-Hickory Forest running for some distance towards the main road by Chase Middle School. The Federal and State Threatened dwarf-flowered heartleaf (*Hexastylis naniflora*) is present in this community type in two scattered locations along small tributaries. The canopy is dominated by white oak, mockernut hickory, scarlet oak (*Quercus coccinea*), southern red oak (*Quercus falcata*), and Virginia pine. The understory is dominated by flowering dogwood (*Cornus florida*), and sourwood (*Oxydendrum arboreum*). Common herbs include partridgeberry (*Mitchella repens*), poverty grass, pipsissewa, ebony spleenwort (*Asplenium platyneuron*), and tickseed (*Coreopsis major*).